AMENDED CLAIMS

1. original) A recombinant poxvirus comprising at least two homologous foreign genes, wherein each of said genes is inserted into a different insertion site of the viral genome.

2. (original) The recombinant poxvirus according to claim 1, wherein the genes have a homology of at least 50%.

3. (original) A recombinant poxvirus comprising at least two homologous foreign genes, said genes having a homology of at least 60%.

4. Currently amended) The recombinant poxvirus according to claim 2 ~~or 3~~, wherein the genes have a homology of 65-75%.

5. (currently amended) The recombinant poxvirus according to ~~claims 1 to 4~~ claim 1, wherein the genes are derived from a flavivirus.

6. (original) The recombinant poxvirus according to claim 5, wherein the flavivirus is a Dengue virus.

7. (currently amended) The recombinant poxvirus according to claim 5 ~~or 6~~ claim 5, wherein the genes are at least two homologous genes derived from at least two different serotypes of the virus.

8. (currently amended) The recombinant poxvirus according to ~~claims 5 to 7~~ claim 5, wherein the genes are at least two PrM genes.

9. (currently amended) The recombinant poxvirus according to ~~claims 5 to 8~~ claim 5, wherein the genes are 4 PrM genes.

10. (currently amended) The recombinant poxvirus according to ~~claims 1 to 9~~ claim 1, wherein the poxvirus is a Vaccinia virus.

11. (original) The recombinant poxvirus according to claim 10, wherein the Vaccinia virus is a Modified Vaccinia Ankara (MVA) virus.

12. (original) The recombinant poxvirus according claim 11, wherein the MVA is MVA-BN deposited at the European Collection of Animal Cell Cultures (ECACC) under number V00083008.

13. (currently amended) The recombinant poxvirus according to ~~claims 1 to 12~~ claim 1, wherein the poxvirus is replication deficient or replication incompetent in mammalian cells, including human cells.

14. (currently amended) The recombinant poxvirus according to ~~claims 1 to 13~~ claim 1, wherein the genes are inserted into a

naturally occurring deletion site and/or into an intergenic region of the poxviral genome.

15. (currently amended) The recombinant poxvirus according ~~claims 1 to 14~~ to claim 1 as medicament or vaccine.

16. (currently amended) A vaccine comprising the recombinant poxvirus according to ~~any of claims 1 to 14~~ claim 1.

17. (currently amended) A pharmaceutical composition comprising the recombinant poxvirus according to ~~any of the claims 1 to 14~~ claim 1 and a pharmaceutically acceptable carrier, diluent, adjuvant and/or additive.

18. (currently amended) The recombinant poxvirus according to ~~any of the claims 1 to 14~~ claim 1, the vaccine according to claim 16 or the composition according to claim 17 for affecting, preferably inducing, an immune response of a living animal, including a human.

19. (currently amended) Use of the recombinant poxvirus according to ~~any of the claims 1 to 14~~ claim 1 for the preparation of a medicament.

20. (currently amended) A method for affecting, preferably inducing, an immune response in a living animal, including a human, comprising administering a therapeutically effective amount of the

recombinant poxvirus according to ~~any of the claims 1 to 14~~ claim 1, ~~the vaccine according to claim 16 or the composition according to claim 17~~ to the animal or human to be treated.

21. (currently amended) A cell comprising the recombinant poxvirus according to ~~claims 1 to 14~~ claim 1.

22. (currently amended) A method for producing a recombinant poxvirus according to ~~claims 1 to 14~~ claim 1 comprising the steps of

- infecting a cell with a poxvirus;
- transfecting the infected cell with a first vector construct comprising a gene being heterologous to the poxviral genome, and a genomic poxvirus sequence capable of directing the integration of the heterologous gene into an insertion site of the poxviral genome;
- identifying, isolating and, optionally, purifying the generated recombinant poxvirus;
- repeating the above steps by using the recombinant poxvirus obtained from previous steps for infecting the cell and an additional vector construct comprising a further gene being heterologous to the poxviral genome and homologous to the gene of the first vector construct.

23. (original) A kit comprising

- two or more vector constructs, each construct comprising a gene under transcriptional control of a poxviral expression control element, wherein the genes included in the different vectors are homologous genes, and wherein each gene is flanked by a poxviral DNA sequence capable of directing the integration of the gene into a poxviral genome, and
- means for identifying and/or selecting recombinant poxviruses, which have incorporated said homologous genes into their genome.

24. (original) The kit according to claim 23, wherein each homologous gene is flanked by a poxviral DNA sequence capable of directing the integration of said homologous gene of each vector construct into a different insertion site of the poxviral genome.

25. (currently amended) A DNA sequence derived from or homologous to the recombinant poxviral genome of the recombinant poxvirus according to ~~claims 1 to 14~~ claim 1, wherein said DNA sequence comprises at least two homologous genes and at least part of the sequences of the poxviral genome.

26. (currently amended) A method for detecting cells infected with the recombinant poxvirus according to ~~claims 1 to 14~~ claim 1, said

method comprising administering the DNA sequence ~~according to claim 25~~to said cells.

27. (currently amended) A method for identifying the recombinant poxvirus according to ~~claims 1 to 14~~ claim 1, said method comprising administering the DNA sequence ~~according to claim 25~~to said virus.